

CLAIMS

What is claimed is:

1. A bridge circuit for echo suppression for a reception signal of a communication device connected to a transmission line, to which can be supplied firstly a transmission signal to be transmitted by the communication device via the transmission line and secondly the reception signal received via the transmission line, which reception signal has a transmission signal portion generated by the transmission signal, the bridge circuit comprising:

at least one bridge branch; and

a variable simulation device connected to the at least one bridge branch, the variable simulation device configured to simulate at least one circuit section of the at least one bridge branch and to balance the bridge circuit;

wherein the bridge circuit is configured such that on balancing the bridge circuit, the reception signal can be tapped at the bridge circuit echo-suppressed with the transmission signal portion generated by the transmission signal being suppressed.

2. The bridge circuit of claim 1, wherein at least part of the at least one bridge branch comprises an impedance of the transmission line, an impedance of a transmitter to be connected to the transmission line, or an impedance of the communication device.

3. The bridge circuit of claim 1, wherein the simulation device is configured and connected to the at least one bridge branch such that a lower level of the transmission signal is present therein than in the at least one bridge branch.

4. The bridge circuit of claim 1, wherein the simulation device is connected in parallel to the at least one circuit section of the at least one bridge branch.

5. The bridge circuit of claim 4, wherein the at least one bridge branch comprises at least one impedance to which is connected in parallel the simulation device to simulate this at least one impedance.

6. The bridge circuit of claim 1, wherein the simulation device has a higher impedance than the circuit section of the at least one bridge branch simulated by the simulation device.

7. The bridge circuit of claim 1, wherein the simulation device is in the form of an integrated circuit.

8. The bridge circuit of claim 1, wherein the simulation device is programmable to balance the bridge circuit.

9. A communication device for transmitting a transmission signal via a transmission line and receiving a reception signal via the transmission line, the device comprising:

a bridge circuit for echo suppression for the reception signal, to which can be supplied firstly the transmission signal and secondly the reception signal, which reception signal has a transmission signal portion generated by the transmission signal, the bridge circuit comprising:

at least one bridge branch; and

a variable simulation device connected to the at least one bridge branch, the variable simulation device configured to simulate at least one circuit section of the at least one bridge branch and to balance the bridge circuit;

wherein the bridge circuit is configured such that on balancing the bridge circuit, the reception signal can be tapped at the bridge circuit echo-suppressed with the transmission signal portion generated by the transmission signal being suppressed.

10. The communication device of claim 9, wherein the device is configured for transmission and reception of xDSL signals.

11. The communication device of claim 9, wherein at least part of the at least one bridge branch comprises an impedance of the transmission line, an impedance of a transmitter to be connected to the transmission line, or an impedance of the communication device.

12. The communication device of claim 9, wherein the simulation device is configured and connected to the at least one bridge branch such that a lower level of the transmission signal is present therein than in the at least one bridge branch.

13. The communication device of claim 9, wherein the simulation device is connected in parallel to the at least one circuit section of the at least one bridge branch.

14. The communication device of claim 13, wherein the at least one bridge branch comprises at least one impedance to which is connected in parallel the simulation device to simulate this at least one impedance.

15. The communication device of claim 9, wherein the simulation device has a higher impedance than the circuit section of the at least one bridge branch simulated by the simulation device.

16. The communication device of claim 9, wherein the simulation device is in the form of an integrated circuit.

17. The communication device of claim 9, wherein the simulation device is programmable to balance the bridge circuit.